No. 737,452. PATENTED AUG. 25, 1903.

J. F. NEEDLES.

DEVICE FOR HANDLING AND MEASURING LARD, &c.

APPLICATION FILED APR. 9, 1903.

NO MODEL.

Fig. 1.

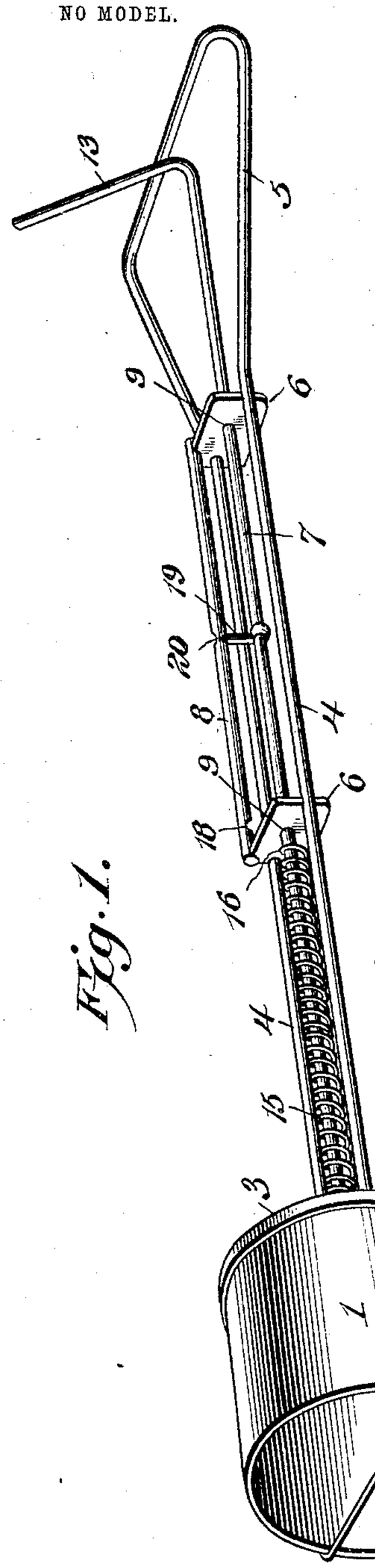


Fig. 4.

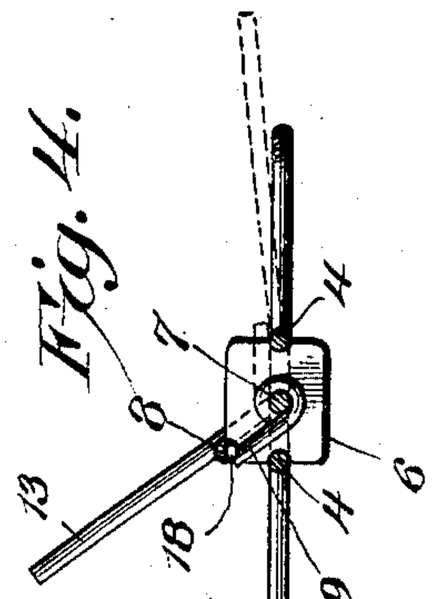


Fig. 3.

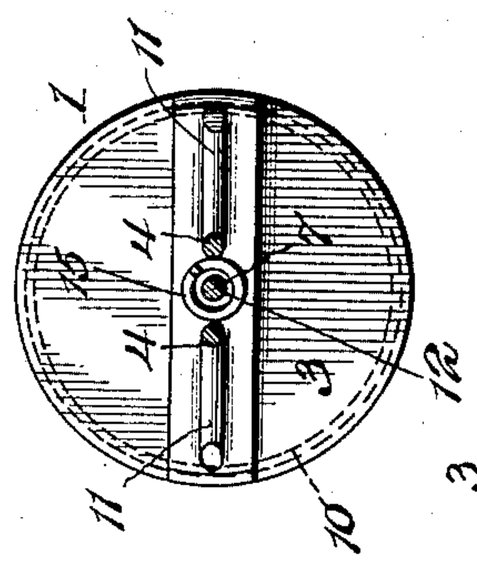
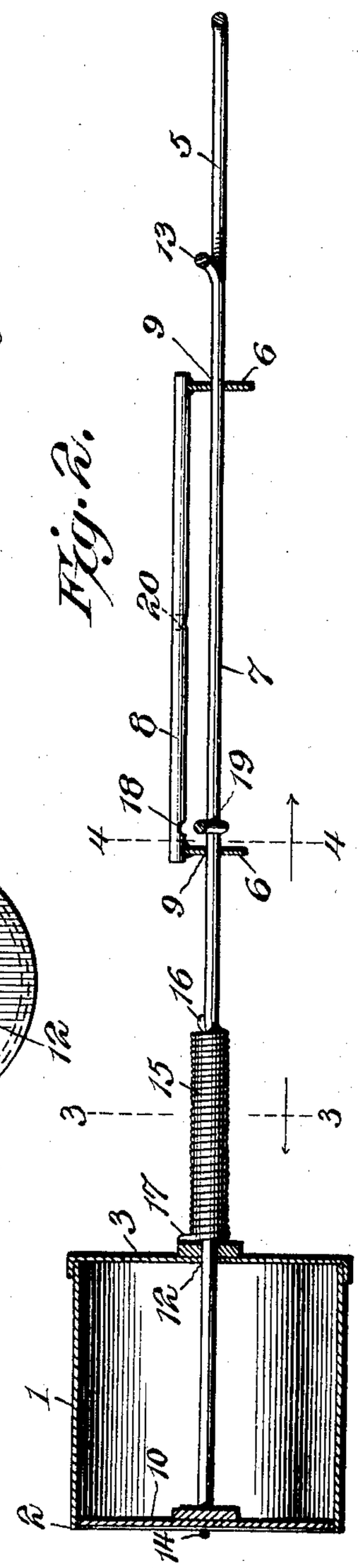


Fig. 2.



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UNITED STATES PATENT OFFICE.

JOEL F. NEEDLES, OF DAYTON, OHIO.

DEVICE FOR HANDLING AND MEASURING LARD, &c.

SPECIFICATION forming part of Letters Patent No. 737,452, dated August 25, 1903.

Application filed April 9, 1903. Serial No. 151,863. (No model.)

To all whom it may concern:

Be it known that I, JOEL F. NEEDLES, a citizen of the United States, residing at Dayton, in the county of Montgomery and State of Ohio, have invented a new and useful Device for Handling and Measuring Lard, &c., of which the following is a specification.

The invention relates to a device for handling and measuring lard and other materials.

The object of the present invention is to improve the construction of devices for handling and measuring lard, butter, ice-cream, and analogous goods or material and to provide a simple, inexpensive, and efficient device designed primarily for use in the retail trade for the sale of lard and adapted to enable the same to be quickly and accurately measured without soiling the hands or the clothing.

A further object of the invention is to provide a device of this character adapted to be readily inserted in a mass of material and capable of readily severing its contents from the mass and of expelling the measured material and of automatically severing the same from the device, so that the entire contents of the latter will be delivered into the dish or other receptacle for the material.

With these and other objects in view the invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended, it being understood that various changes in the form, proportion, size, and minor details of construction within the scope of the claims may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings, Figure 1 is a perspective view of a device constructed in accordance with this invention for handling and measuring lard and the like. Fig. 2 is a longitudinal sectional view of the same. Fig. 3 is a transverse sectional view on the line 3 3 of Fig. 2. Fig. 4 is a similar view on the line 4 4.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

1 designates a cylindrical measuring-receptacle open at the outer end and provided thereat with a cutting edge 2 and secured at its inner closed end 3 to a handle-frame composed of parallel sides 4 and a loop or handle 5, connecting the outer ends of the sides and formed integral with the same. The sides of the handle-frame are connected by transverse portions 6, forming guides for a plunger-rod 7 and supports for a combined guide and locking device 8. The transverse connecting portions 6 are provided with openings 9 for the reception of the plunger-rod 7, and in practice the handle-frame, with its connecting or cross pieces, and the combined guide and locking device will consist of a single casting; but it may be constructed in any desired manner and of any suitable metal, as will be readily understood. The frame will in practice be made of white metal, and the cylindrical measuring-receptacle and the head 10 of the plunger-rod will preferably be constructed of aluminium or some other hard metal which will not corrode or wear off and discolor the lard or other material. The inner ends of the sides of the handle-frame are provided with lateral extensions or arms 11, which are secured to the outer face of the inner end of the measuring-receptacle, as clearly indicated in Fig. 3 of the drawings. The connecting cross-pieces 6, which are located approximately equidistant of the ends of the handle-frame, have their apertures 9 in register with a central opening 12 of the inner end of the measuring-receptacle, and the plunger-rod 7 extends through the openings of the cross-pieces 6 and the inner end of the measuring-receptacle, as clearly shown in Fig. 2. The outer end of the plunger-rod is provided with a suitable handle or grip 13, and the plunger-head or follower 10 is suitably secured to the inner end of the plunger-rod.

The cylindrical measuring-receptacle is provided at its outer end with a cutting device consisting of a diametrically-disposed cross-piece 14, of wire or other suitable material, suitably connected at its ends to the sides of the measuring-receptacle at diametrically opposite points. The measuring-receptacle, which may be constructed of any size to hold the desired weight of lard or other material, is plunged into the mass of lard to fill the measuring-receptacle, and it is then rotated one-half a revolution to cause the cutting de-

vice to sever the material within the receptacle from the mass into which the device is inserted. The device is then withdrawn, carrying with it the entire contents of the measuring-receptacle. In practice it has been found by experience that a pound, two pounds, or other quantity of lard may be accurately measured, and the present device is designed to enable lard to be quickly and accurately handled without soiling the hands or the clothing. The plunger is actuated to expel the contents of the measuring-receptacle by means of a coiled spring 15, disposed on the plunger-rod and secured at its end 16 to the same and at its other end 17 to the inner end of the measuring-receptacle, whereby when the plunger is drawn inward preparatory to inserting the measuring-receptacle into a mass of lard the spring will be distended, as shown in Fig. 1. The spring when free to act will force the plunger or follower outward and discharge the material, as will be readily understood.

The combined guide and locking device 8 consists of a short rod or bar arranged parallel with one of the sides of the handle-frame and provided at its inner end adjacent to the inner cross-piece 6 with a notch or recess 18, which forms a passage-way for an arm 19 of the rod of the plunger or follower. Preparatory to drawing the head of the plunger or follower inward, as before explained, the plunger-rod is partially rotated to carry the arm from the position indicated in dotted lines in Fig. 4 of the drawings across the frame through the notch or recess 18. The plunger-rod is then drawn outward to move the head or follower to the inner end of the measuring-receptacle, and it is locked in this position by engaging the arm 18 with a shoulder 20 of the combined guide and locking device 8. The shoulder 20 is preferably formed by notching the combined guide and locking device, and the arm 19 is adapted after the receptacle has been removed from the mass of lard or other material and has been placed over a dish to be disengaged from the shoulder by partially rotating the plunger-rod. This may be effected by pressing slightly on the handle 13. The spring will then operate and move the head of the plunger or follower outward automatically to expel the contents of the measuring-receptacle, and when the head of the plate or follower reaches the limit of its outward movement and bears against the cutting device 14 the arm 19 will have arrived at the notch or recess 18, whereby the spring will be permitted to automatically rotate the plunger or follower, and thereby cause the same to operate in conjunction with the cutting device and sever the material from the head of the plunger or follower. It will thus be seen that the cutting device operates to sever the material from the mass and also to cut the same from the head of the plunger or follower. By this construction the entire contents of the measuring-receptacle are removed from the mass of material and are expelled subsequently from the measuring-receptacle, thereby enabling lard and other material to be quickly and accurately handled without soiling the hands of the operator or his clothing. In setting the plunger or follower the spring is distended and twisted, and it returns when released to its initial position, thereby first reciprocating the plunger or follower and then partially rotating the same to effect the discharging and cutting operations.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A device of the class described provided with a receptacle adapted to be forced into a mass of material and provided with a fixed cutting device operated by the rotation of the receptacle to sever the material within the receptacle from the rest of the mass, and a rotary plunger coöperating with the fixed cutting device, whereby the material is separated from the plunger, substantially as described.

2. A device of the class described provided with an open-ended receptacle adapted to be forced into a mass of material and provided at its outer end with a fixed cutting device extending across the end of the receptacle, whereby when the same is rotated the material within the receptacle will be severed from the rest of the mass, and a rotary plunger operating within the receptacle and coöperating with the fixed cutting device, whereby the material is separated from the plunger, substantially as described.

3. A device of the class described comprising a receptacle adapted to be forced into a mass of material for removing a quantity of the same, and means for expelling the material from the receptacle and for automatically severing the said material from the device, substantially as described.

4. A device of the class described comprising a receptacle adapted to be forced into a mass of material for removing a portion of the same, and means for automatically expelling the material from the receptacle and for automatically severing the material from the device, substantially as described.

5. A device of the class described comprising a receptacle provided with a cutting device for severing its contents from the rest of the mass, and means coöperating with the cutting device for expelling the material from the receptacle and for automatically severing such material from the device, substantially as described.

6. A device of the class described comprising a receptacle, a cutting device, a plunger, and means for reciprocating the plunger and for automatically rotating the same against the cutting device, substantially as described.

7. A device of the class described comprising a receptacle provided with a cutting device, a plunger, a spring connected with the

plunger for reciprocating the same, said spring being arranged to be twisted for partially rotating the plunger against the cutting device, and means for guiding the plunger during its reciprocation and for releasing the same at the end of such movement to permit the spring to rotate the plunger, substantially as described.

8. A device of the class described comprising a receptacle provided with a cutter, a reciprocating plunger capable of rotation, a coiled spring disposed on and connected with the plunger to reciprocate and rotate the same, and means for guiding the plunger, substantially as described.

9. A device of the class described comprising a receptacle having a fixed cutter, a frame connected with the receptacle and provided with a handle, a rotary plunger guided on the frame and having a head arranged within the receptacle, a coiled spring disposed on the plunger and connected with the same for reciprocating and rotating the plunger, and a combined guide and locking device for holding and guiding the plunger, substantially as described.

10. A device of the class described comprising a receptacle, a cutting device, a spring-actuated plunger having an arm, and a frame provided at one side with a combined guide and locking device arranged to receive the arm, substantially as described.

11. A device of the class described comprising a receptacle, a spring-actuated plunger having an arm, a frame provided with a combined guide and locking device consisting of a rod having a notch to form a passage-way for the arm and provided with a shoulder for engaging the arm, and a cutting device cooperating with the plunger, substantially as described.

12. A device of the class described comprising a receptacle, a handle-frame connected with the receptacle and composed of opposite sides and connecting cross-pieces, a plunger guided in the frame and provided with an arm, and a rod mounted on the frame and forming a combined guide and locking device and provided with a recess to receive the arm and having a shoulder for engaging the same, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JOEL F. NEEDLES.

Witnesses:
W. H. HOSKOT,
GUS BECKER.